



Recommended Installation, Maintenance, and Inspection Instructions for GILBARCO CATLOW Breakaways

(CAT-42) R0914

Use only Catlow-supplied O-rings for all maintenance and repairs



ENSURE TO CHECK THE FOLLOWING DAILY

- Check breakaways for leaks
- Whip hose is in good condition, no cuts, cracks, or blisters
- Whip hose fittings are clean and dry

CAUTION

GILBARCO CATLOW ASSUMES NO LIABILITY FOR ANY BREAKAWAY REPAIRED IN THE FIELD. GILBARCO CATLOW MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE.

CAUTION

GILBARCO CATLOW products should be used with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled.

LIMITED WARRANTY

GILBARCO CATLOW expressly warrants that its products shall be free from defects in material and workmanship for a period of one year from the date of manufacture. This warranty is limited to repair or replacement by GILBARCO CATLOW upon return of the product to the GILBARCO CATLOW factory. This warranty does not apply in the event of any misuse or neglect of the product. The foregoing warranty is the exclusive remedy of purchasers of GILBARCO CATLOW products. GILBARCO CATLOW expressly disclaims any warranties, other than the foregoing express warranty, including the implied warranties of merchantability and fitness for a particular purpose, and disclaims any and all liability for consequential damages resulting from the use of its products.

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MDE-5335C
(CAT- 42) R0914
May 2022

WARNING

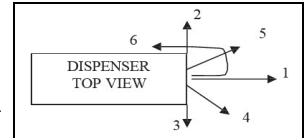
- USE ONLY ON SYSTEMS RATED AT 50 PSI MAXIMUM.
- USE ON SYSTEMS HAVING HIGHER STATIC PRESSURE (MAY CAUSE PREMATURE SEPARATION).
- ALWAYS TEST ELECTRICAL CONTINUITY BY FOLLOWING PETROLEUM EQUIPMENT INSTITUTE (PEI)-RECOMMENDED TEST PROCEDURE (PEI/RP400-02).

BEFORE YOU BEGIN

- Refer to the breakaway model for the maximum value of pull force before you proceed with the installation instructions.
- Ensure care when testing to prevent damage to the dispenser or physical injury.
- **Only qualified personnel should inspect/repair the equipment** (PEI/RP500 11 9.2.3).
- **ALL DISPENSERS MUST BE BOLTED TO THE ISLAND** (NFPA® 30A 6.3.4 and PEI/RP500-11 2.2).

CONFIRM DISPENSER IS SECURE

- Attach a spring scale to the dispenser where the breakaway will be installed.
- Apply a 350 lbs pull force at various angles and check the emergency valves, dispenser, and hose assembly [Underwriters Laboratories (UL® STANDARD 567)].
- Release the load and complete the installation of the breakaway.



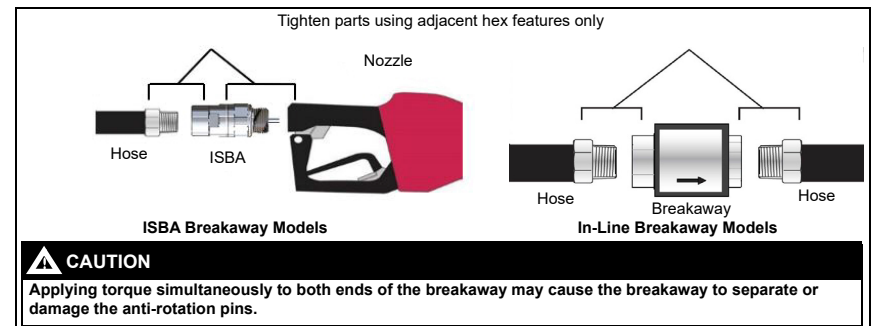
INSTALLATION NOTES

- Notes: 1) The GILBARCO CATLOW in-line breakaway must always be installed between two hose sections (for example, whip and main hose).
- 2) On side hose connections, install the breakaway between the nozzle and the hose retractor (NFPA 30A 6.5.3). DO NOT INSTALL THE BREAKAWAY ON THE DISPENSER SIDE OF THE HOSE RETRACTOR.
- 3) On an overhead hose connection, install the short section of whip hose, followed by the breakaway, hose, and nozzle.
- 4) ISBA models are installed between the nozzle and the primary hose.

INSTALLATION INSTRUCTIONS FOR IN-LINE and ISBA BREAKAWAYS

To install in-line breakaways, proceed as follows:

1. Isolate/turn OFF the dispenser and relieve the line pressure from the system by opening the nozzle and allowing the system to drain into an approved metal container.
2. Observe the flow direction arrow on the breakaway and install with the flow arrows pointing towards the nozzle.
3. Use thread sealant recommended by UL for petroleum products on pipe thread connections, such as Gasoila E-Seal formulated for E10 and E85.
4. Use oil or grease on straight or metric thread O-ring fittings, such as Waypure 68 Oil, Petroleum Jelly, E-Seal, Parker Super O-Lube. DO NOT USE TEFLON® TAPE.
5. Tighten hoses using the hex on the breakaway that is adjacent to the hose being installed (see examples 1 and 2).



6. Activate/turn the dispenser ON and purge the hoses and nozzles of air into an approved metal container.
7. Check the system for leaks and replace any item that exhibits signs of leakage.

- Notes: 1) Use only UL-listed paste type thread sealant, such as Gasoila E-Seal formulated for E10 and E85.
- 2) Hoses should not be long enough that a vehicle could drive over the hose resulting in a direct pull on the retractor cable or dispenser and bypass the breakaway.

ALWAYS REFER TO YOUR LOCAL CITY, STATE,
OR FEDERAL TESTING REGULATIONS

ONLY QUALIFIED PERSONNEL SHOULD
INSPECT/REPAIR EQUIPMENT (PEI/RP50 11 9.2.3)

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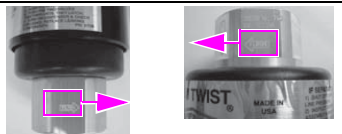
CAM TWIST MAGNETIC BREAKAWAYS FOR MODELS: CTM75, CTM100, and CTMVA**IF SEPARATION OCCURS**

1. Isolate/turn OFF the dispenser, relieve the line pressure from the whip hose and the nozzle hose, and drain fuel into an approved metal container.
2. Inspect the entire system for damage and/or leaks. Replace any damaged components in the system (PEI/RP500 11 9.2.2).
3. **Clean the magnet surfaces** on both the male and female couplings and inspect for damage. Clean parts are to be free from foreign debris and contaminants.
4. Replace the damaged O-rings using GILBARCO CATLOW Repair kit.
Note: Lubricate the O-rings and the mating male and female surfaces with oil or grease, such as Waypure 68 Oil or Petroleum Jelly. If the lower unit is damaged, replace with new lower unit available through Catlow.
5. Align the flow arrows and push the halves together engaging the coupling mechanism until a noticeable snap is felt indicating the unit is properly reconnected.
6. Test the reconnection by pulling on the hose just below the breakaway.
7. Activate/turn ON the dispenser and purge the hose and nozzle of air into an approved metal container.
8. With the system pressurized, check for leaks around the breakaway, nozzle, both hoses, and all joints.
9. Replace any item that exhibits signs of leakage.

Note: Catlow recommends using a swivel end hose in proximity to the CAM TWIST.

SEPARATES IN ONE DIRECTION ONLY

Use two open-end wrenches and apply a clockwise rotary torque.

**ANNUAL MAINTENANCE AND INSPECTION INSTRUCTIONS****IMPORTANT INFORMATION**

1. Inspect Cam Twist Breakaway annually.
2. Serviceable Life is 10 years for Cam Twist Breakaways.
3. Use only Catlow Repair kits, if needed.


1. Isolate/turn OFF the dispenser, relieve the line pressure from the whip hose and the nozzle hose, and drain fuel into an approved metal container.
2. Separate the Cam Twist Breakaway by applying clockwise rotary torque to the hex ends of the breakaway. Use two open-end wrenches.
Note: Cam Twist separates in one direction ONLY as indicated by twist arrows (see above figure).
3. Inspect the O-rings for cuts or missing sections, dried or cracked condition or other signs of deterioration.
4. Inspect operation of the poppets by depressing the exposed ends of the poppets. If the poppets fail to return to the closed position, the entire breakaway must be replaced.

**CAUTION****WEAR EYE PROTECTION. SOME FUEL MAY EXIT OUT OF THE POPPETS.**

5. Clean the magnet surface of both the male and female couplings. Inspect for damage or corrosion. Clean parts to be free from foreign debris and contaminants.
6. Replace the damaged O-rings using GILBARCO CATLOW Repair Kit.
Note: Lubricate the O-rings and the mating male and female surfaces with oil or grease.
7. Align the flow arrows and push the halves together engaging the coupling mechanism until a noticeable snap is felt indicating the unit is properly reconnected.
8. Test the reconnection by pulling on the hose just below the breakaway.
9. Activate/turn ON the dispenser and purge the hose and nozzle of air into an approved metal container.
10. With the system pressurized, check for leaks around the breakaway, nozzle, both hoses, and all joints.
11. Replace any item that exhibits signs of leakage.

Notes: 1) Serviceable life of the Cam Twist breakaways is 10 years when annual maintenance and inspections are performed.

2) For ordering specification, refer to product cut sheet.

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Repair Kits

Note: For ordering specifications, refer to product cut sheets.



Part #	Description
2976	Repair Kit CTM75 and CTM100
2977	Repair Kit CTMVA and CTMCA

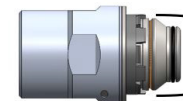
FAIL-SAFE BREAKAWAYS FOR MODELS: C86NT and C100N**IF SEPARATION OCCURS**

1. Isolate/turn OFF the dispenser, relieve the line pressure from the whip hose and the nozzle hose, and drain fuel into an approved metal container.
2. Inspect the entire system for damage and/or leaks. Replace any damaged components in the system (PEI/RP500 11 9.2.2).
3. Remove the breakaway.
4. Do not attempt to repair a separated C86NT or C100N Breakaway.
5. Install the NEW C86NT or C100N Breakaway.
6. Test the reconnection by pulling on the hose just below the breakaway.
7. Perform pressure test for leakage.

**C86NT****C100N****Model: ISBA****IF SEPARATION OCCURS**

1. Isolate/turn OFF the dispenser, relieve the line pressure, and drain fuel into an approved metal container.
2. Inspect the dispenser, hose assembly, and both halves of the swivel/breakaway for damage. If any damage is observed, remove the damaged component from the service.
3. Unscrew the ISBA both halves from the hose and nozzle.
4. Clean all the parts (internal and external) and check for any broken plastic parts, deformations, or any other part damages that might have occurred during separation.
5. Clean the male body C-Ring sliding area (refer below figure), and ensure that there is no foreign material.
6. Lubricate with BERULUBE FR16 all metallic sliding surfaces of the male half, as well as the groove for the C-Ring on the female half. Also lubricate the internal diameter that contacts with the spacer.
7. Lubricate the O-rings with BERULUBE FR16, Parker O-Lube, Waypure 68 oil, or Petroleum jelly. Replace any damaged O-rings. Contact GILBARCO CATLOW for spare parts.
8. Align the two halves of the breakaway and push together with the help of mechanical vise, until a noticeable snap is felt, indicating that the unit is together. DO NOT push on the plastic stem. Ensure not to damage the threads during reconnection.
9. Test the reconnection by pulling on the hose just below the breakaway.
10. Activate/turn ON the dispenser and check for leakage. In case of leakage, replace the unit.

Lubricate the circumference
of the male half's C-Ring



Lubricate the circumference of
the C-Ring sliding area